

16523 U.S. PTO  
021204

PTO/SB/05 (01-04)

Approved for use through 07/31/2006. OMB 0651-0032  
U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>UTILITY PATENT APPLICATION TRANSMITTAL</b>  (Only for new nonprovisional applications under 37 CFR 1.53(b))	Attorney Docket No.	P06604US00
	First Inventor	KANG, SEOGCHAN, t al.
	Title	A DUAL SELECTION BASED, TARGETED GENE DISRUPTION METHOD FOR FUNGI AND FUNGUS-LIKE ORGANISMS
	Express Mail Label No.	EV 298923308 US

<b>APPLICATION ELEMENTS</b> SEE MPEP chapter 600 concerning utility patent application contents.	<b>ADDRESS TO:</b> Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450
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1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages: 60]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table,  
or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets: 8]
5. Oath or Declaration [Total Sheets: 2]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
Named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b)
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)
  - a. ☒ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☒ paper
  - c. ☒ Statements verifying identity of above copies


ACCOMPANYING APPLICATION PARTS	
9. <input type="checkbox"/> Assignment Papers (cover sheet & documents(s))	
10. <input type="checkbox"/> 37 CFR 3.73(b) Statement (when there is an assignee)	<input checked="" type="checkbox"/> Power of Attorney
11. <input type="checkbox"/> English Translation Document (if applicable)	
12. <input checked="" type="checkbox"/> Information Disclosure Statement (IDS)/PTO-1449	<input checked="" type="checkbox"/> Copies of IDS Citations
13. <input type="checkbox"/> Preliminary Amendment	
14. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) (Should be specifically itemized)	
15. <input type="checkbox"/> Certified Copy of Priority Document(s) (if foreign priority is claimed)	
16. <input type="checkbox"/> Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.	
17. <input type="checkbox"/> Other: _____	

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No.:

Prior application information: Examiner: \_\_\_\_\_ Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number	<u>27407</u>			OR <input type="checkbox"/> Correspondence address below	
Name					
Address					
City	State	Zip Code			
Country	Telephone	Fax			
Name (Print/Type)	EDMUND J. SEASE		Registration No. (Attorney/Agent)	24,741	
Signature			Date	February 12, 2004	

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

22857 U.S. PTO  
10/777405  
021204

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PTO/SB/17 (10-03)

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**FEE TRANSMITTAL**  
**for FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 962.00

**Complete if Known**

Application Number	
Filing Date	February 12, 2004
First Named Inventor	KANG, Seogchan, et al.
Examiner Name	
Art Unit	
Attorney Docket No.	P06604US00

**METHOD OF PAYMENT (check all that apply)**☒ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit  
Account  
Number  
Deposit  
Account  
Name

26-0084

McKee, Voorhees &amp; Sease, PLC

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☐ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 770	2001 385	Utility filing fee	385.00
1002 340	2002 170	Design filing fee	
1003 530	2003 265	Plant filing fee	
1004 770	2004 385	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
<b>SUBTOTAL (1)</b>			<b>(\$ 385.00)</b>

**2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

Total Claims	Extra Claims	Fee from below	Fee Paid
65	-20** = 45	X 9	= 405.
Independent Claims	7	- 3** = 4	X 43 = 172
Multiple Dependent			

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	
1202 18	2202 9	Claims in excess of 20	
1201 86	2201 43	Independent claims in excess of 3	
1203 290	2203 145	Multiple dependent claim, if not paid	
1204 86	2204 43	** Reissue independent claims over original patent	
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent	
<b>SUBTOTAL (2)</b>			<b>(\$ 577.00)</b>

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity


Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 420	2252 210	Extension for reply within second month	
1253 950	2253 475	Extension for reply within third month	
1254 1,480	2254 740	Extension for reply within fourth month	
1255 2,010	2255 1,005	Extension for reply within fifth month	
1401 330	2401 165	Notice of Appeal	
1402 330	2402 165	Filing a brief in support of an appeal	
1403 290	2403 145	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,330	2501 665	Utility issue fee (or reissue)	
1502 480	2502 240	Design issue fee	
1503 640	2503 320	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 770	2809 385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 770	2810 385	For each additional invention to be examined (37 CFR 1.129(b))	
1801 770	2801 385	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$ 0**SUBMITTED BY**

(Complete if applicable)

Name (Print/Type)	EDMUND J. SEASE	Registration No. (Attorney/Agent)	24,741	Telephone	515-288-3667
Signature		Date	February 12, 2004		

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT : KANG, Seogchan, et al.  
SERIAL NO : (New)  
FILED : February 12, 2004  
TITLE : A DUAL SELECTION BASED, TARGETED GENE DISRUPTION  
METHOD FOR FUNGI AND FUNGUS-LIKE ORGANISMS

Grp./A.U. :  
Examiner :  
Conf. No. :  
Docket No. : P06604US00

**PETITION TO ACCEPT PHOTOGRAPHS AS DRAWINGS  
(37 C.F.R. 1.84(b)(2))**

COMMISSIONER FOR PATENTS  
Mail Code  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

1. Petition is hereby made to accept photographs in this case.
2. Three (3) sets of photographs are submitted herewith.
3. The reason why photographs are necessary in this case is as follows:

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**CERTIFICATE OF MAILING BY EXPRESS MAIL**

I hereby certify that this document and the documents referred to as enclosed therein are being deposited with the U. S. Postal Service in an envelope as "Express Mail Post Office to Addressee" addressed to: Commissioner of Patents, Mail Stop Patent Application, P. O. Box 1450, Alexandria, VA 22313-1450, prior to 5:00 p.m. on 12th day of February, 2004.

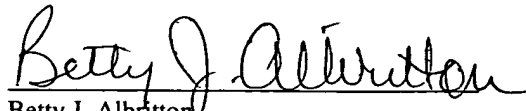
  
Betty J. Albritton  
Express Mail Label #EV 298923308 US

Figure 3 shows the growth of *Magnaporthe grisea*, *Fusarium oxysporum*, *Aspergillus fumigatus*, and *Botrytis cinerea* in the presence of F2dU or Ganciclovir. Wild-type strains (wt) and transformants with *ChGPD-HSVtk (tk)* of *M. grisea* (A & E), *F. oxysporum* (B), *A. fumigatus* (C), and *B. cinerea* (D) were grown in the presence of F2dU (A-D) or Ganciclovir (E) at concentrations ranging from 5nM to 50µM (F2dU) or 1µM to 2mM (Ganciclovir).

Respectfully submitted,



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Attorneys of Record

- bja -